

## PRODUCT DATA SHEET

# SikaFume<sup>®</sup>-400

Silica fume in powder form as inorganic concrete and dry mortar additive

## DESCRIPTION

SikaFume<sup>®</sup>-400 is a highly fine, pozzolana additive to produce dense and durable concrete and mortar.

## USES

- For mortar and concrete, where high strength and durability, high impermeability to water and chemicals should be promoted
- In the production of high-performance sprayed concrete with increased demands on sealing, application thickness and rebound reduction

## FEATURES

SikaFume<sup>®</sup>-400 is a powdery, partly compacted, mainly amorphous silica fume, which reacts like pozzolana cement.

SikaFume<sup>®</sup>-400 causes in concrete and mortar:

- Increase the compressive strength
- Improving the binding between cement paste matrix and aggregate grains
- Reduction of porosity through reaction with cement constituents
- Improved stability and rheology
- Higher abrasion resistance
- Reduced rebound in shotcrete
- Reduction of efflorescence
- Increase resistance to freezing/thawing and de-icing salts
- Improvement of the chemical resistance

## PRODUCT INFORMATION

Composition	Amorphous silica
Packaging	Bigbag: 800 kg or bulk on demand
Shelf life	Minimum 1 year shelf life in sealed packaging.
Storage conditions	Store dry like cement. When supplied use clean containers.
Appearance and colour	Fine grey powder
Bulk density	Approx. 0.3 g/cm <sup>3</sup>
Solid content by mass	SiO <sub>2</sub> > 85 % average approx. 95 %

## APPLICATION INFORMATION

<b>Recommended dosage</b>	Max. 11 M.-% of the cement weight Initial testing according to DIN EN 206-1/DIN 1045-2 is required.
<b>Dispensing</b>	SikaFume®-400 must be simultaneously added with the cement. To reduce the increased water demand, utilise Sika ViscoCrete. The required mixing time after the addition is dependent on the mixer and must be sufficiently dimensioned. In dry mortar application SikaFume®-400 is added to the dry mix. An initial test according to DIN EN 206-1 is required before use.

## BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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**PRODUCT DATA SHEET**  
SikaFume®-400  
July 2023, Version 01.01  
021403031000000129

SikaFume-400-en-DE-(07-2023)-1-1.pdf